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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,371	03/18/2005	Seiji Kagawa	Q86813	4689
23373 7590 08/28/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER O HERN, BRENT T	
			ART UNIT 1772	PAPER NUMBER
			MAIL DATE 08/28/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/528,371	<b>Applicant(s)</b> KAGAWA, SEIJI	
	<b>Examiner</b> Brent T. O'Hern	<b>Art Unit</b> 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 9-12, 19-57, 61-64 and 66-83 is/are pending in the application.
- 4a) Of the above claim(s) 9-12, 19-57 and 61-64 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 66-83 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 17 July 2007 has been entered.

### ***Claims***

2. Claims 9-12, 19-57, 61-64 and 66-83 are pending with claims 9-12, 19-57, 61-64 withdrawn and claims 66-83 new.

## **WITHDRAWN REJECTIONS**

3. The 35 U.S.C. 102(b) rejections of claims 1-6, 8, 13-15, 17 and 58-60 as being anticipated by Tavss et al. (US 5,407,742) of record in the Office Action mailed 17 April 2007, page 2, paragraph 6 have been withdrawn due to Applicant's amendments in the Paper filed 17 July 2007.

4. The 35 U.S.C. 103(a) rejection of claim 16 as being as being unpatentable over Tavss et al. (US 5,407,742) in view of Kobayashi (US 6,543,208) of record in the Office Action mailed 17 April 2007, page 6, paragraph 7 have been withdrawn due to Applicant's amendments in the Paper filed 17 July 2007.

5. The 35 U.S.C. 103(a) rejection of claims 18 and 65 as being as being unpatentable over Tavss et al. (US 5,407,742) of record in the Office Action mailed 17

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April 2007, page 7, paragraph 8 have been withdrawn due to Applicant's amendments in the Paper filed 17 July 2007.

### NEW REJECTIONS

#### ***Claim Rejections - 35 USC § 103***

6. Claims 66-83 are rejected under 35 U.S.C. 103(s) as being unpatentable over Tavss et al. (US 5,407,742).

Regarding claim 66, Tavss ('742) teaches a shape-memory polybutylene terephthalate laminate film (See col. 3, ll. 29-34, 65-66 and FIGs-1 and 2, #10 wherein *the polybutylene terephthalate structure has the ability to be deformable, thus, exhibiting shape-memory properties upon the application of an external force.*) comprising (a) a polybutylene terephthalate film (See FIG-1, 311.), and

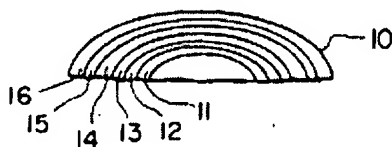
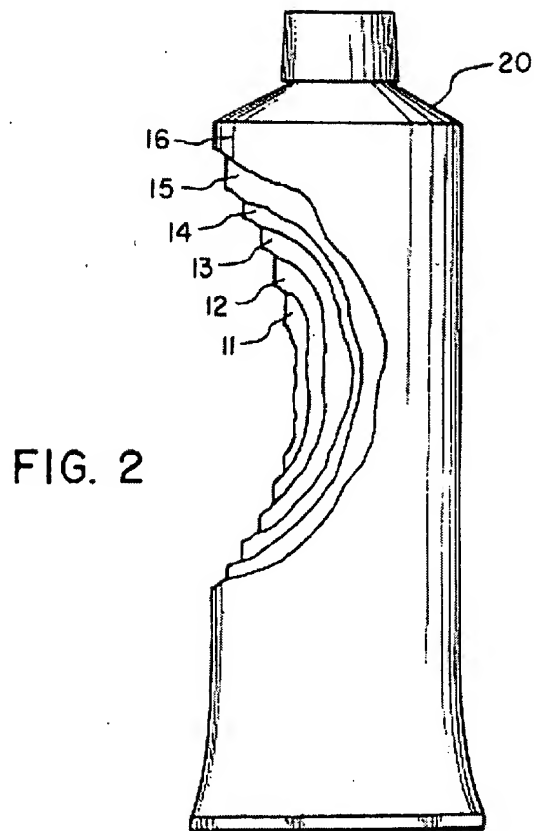


FIG. 1



(b) a paper sheet or a metal foil (See col. 3, ll. 39-40 and FIGs 1-2, paper #15 and foil #13.), and wherein the laminate film having a memory of a first shape (See FIGs 1-2 and col. 3, ll. 29-32 and 65-66 wherein the laminate clearly has a memory of a first shape, in the shape of a tube.) however, fails to expressly disclose wherein said laminate film having a memory of a first shape given by a shaping treatment at a temperature T1 equal to or lower than the glass transition temperature of said polybutylene terephthalate.

Firstly, it is noted that the patentability of the product is defined by the structural limitations of the product and any temperature applied during the production of the product is not a structural limitation.

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Furthermore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made that the polybutylene terephthalate containing laminate of Tavss ('742) has a shape created by a shaping treatment (*See FIGs 1-2 and col.4, ll. 51-68 wherein the structure can be formed by various processes and obviously manipulated by hand and said temperature is well known to be present in a typical atmospheric setting.*). Furthermore, it is noted said structure will clearly regain its previous shape upon the application of an external force directly to the structure, to a different portion of the structure or by filling or emptying the structure.

The phrases "but being in a second shape given by deformation at a temperature T2 higher than said glass transition temperature, so that said laminate film recovers said first shape when exposed to a temperature equal to or higher than said temperature T1" in claim 66; lines 5-8; "wherein said temperature T2 is higher than 45°C and 65°C or lower" in claim 68, lines 2-3; "wherein said second shape is substantially a flat shape or an oppositely curled shape" in claims 69 and 76, lines 2-3 of both claims; "wherein said second shape is a flat shape" in claims 70 and 77, line 2 of both claims; "where the elongated polybutylene terephthalate laminate film keeps an elastic recovery force" in claims 71 and 78, lines 3-4 of both claims; "where the polybutylene terephthalate laminate film is stretched by 1 to 3%" in claims 72 and 79, lines 3-4 of both claims; "but being in a second shape given by deformation at a temperature T6 higher than said glass transition temperature and lower than said temperature T4, so that said laminate film recovers said first shape when exposed to a temperature equal to or higher than said temperature T4" in claim 73, lines 5-8 and "wherein said temperature T6 is 45 to 65°C" in claim 74, lines 2-3 are deemed to be statements with regard to the **intended**

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**use** and are not further limiting in so far as the structure is concerned (*see MPEP 2111.02*).

Furthermore, it is noted that the initial shape is interpreted as a structural limitation of the product and any subsequent manipulation of the structure negates the initial structure, thus, is not a definite fixed limitation of the claimed structure.

Regarding claims 67 and 68, Tavss ('742) teaches the film discussed above, however, fails to expressly disclose wherein said temperature T1 is 35°C or lower/(15 to 25°C).

Firstly, it is noted that patentability of the product is defined by the structural limitations of the product and any temperature applied during the production of the product is not a structural limitation.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made that said temperatures are well known to be those within those typically found in an atmospheric setting, thus providing for shaping treatment of the structure.

Regarding claims 69-70 and 76-77, Tavss ('742) teaches the film discussed above, however, fails to expressly disclose wherein said first shape is a curled/(tray) shape.

However, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to provide the above shapes since any deflection from a horizontal plane would provide for a curled shape which is what is done to the structure during typical use and a horizontal orientation would provide for a tray shape, which is typical prior to and during use.

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Regarding claims 71-72 and 78-79, Tavss ('742) teaches wherein the polybutylene terephthalate laminate film adheres to another film or film laminate in a state (*See col. 3, ll. 37-50.*).

Regarding claim 73, Tavss ('742) teaches a shape-memory polybutylene terephthalate laminate film (*See col. 3, ll. 29-34 and FIGs-1 and 2, #10.*) comprising (a) a polybutylene terephthalate film, and (b) a paper sheet, or a metal foil (*See col. 3, ll. 39-40 and FIGs 1-2, paper #15 and foil #13.*), and wherein the laminate film having a memory of a first shape (*See FIGs 1-2 wherein the laminate clearly has a memory of a first shape, in the shape of a tube.*), however, fails to expressly disclose wherein said laminate film having a memory of a first shape given by a shaping treatment at a temperature T4 higher than the glass transition temperature and lower than the melting point of said polybutylene terephthalate,

However, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made that the polybutylene terephthalate containing laminate of Tavss ('742) has a shape created by a shaping treatment (*See FIGs 1-2 and col.4, ll. 51-68 wherein the structure can be formed by various processes and obviously manipulated by hand and said temperature is well known to be present in a typical atmospheric setting.*). Furthermore, it is noted said structure will clearly regain its previous shape by the application of an external force directly to the structure, to a different portion of the structure or by such method of filling or emptying the structure.

Regarding claims 74-75, Tavss ('742) teaches the film discussed above, however, fails to expressly disclose wherein said temperature T4 is 75 to 100°C/(90 to 100°C)



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However, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made that said temperatures are well known to be those typically found in a processing environment, thus providing for shaping treatment of the structure.

Regarding claims 80-81, Tavss ('742) teaches a package sheet constituted by a shape-memory polybutylene terephthalate laminate film (*See FIGs 1-2*).

Regarding claims 82-83, Tavss ('742) teaches the film discussed above, however fails to expressly teach a container lid constituted by the shape-memory polybutylene terephthalate laminate film, however, Tavss ('742) teaches the use of the above packaging film to protect the packaged product (*col. 3, ll. 32-56*) for the purpose of decreasing the degree of flavorant absorption (*col. 2, ll. 51-52*). Therefore, it would have been obvious to incorporate the film into a lid in order to provide a lid with decreased flavorant absorption.

### **ANSWERS TO APPLICANT'S ARGUMENTS**

7. In response to Applicant's arguments (*p. 19, para. 2 to p. 21, para. 3 of Applicant's Paper filed 17 July 2007*) that Tavss ('742) does not anticipate or render obvious the newly added claims, it is firstly noted that none of the pending claims are rejected under 35 USC 102. Furthermore, it is noted that the newly added claims are discussed above.


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent T. O'Hern whose telephone number is (571) 272-0496. The examiner can normally be reached on M-Th, 9:00-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Brent T O'Hern  
Examiner  
Art Unit 1772  
August 15, 2007

 8/23/07  
NASSER AHMAD  
PRIMARY EXAMINER